

Multnomah County Willamette River Bridges Capital Improvement Plan



Project Summary Information: Rall Wheel Rehabilitation							
Bridge Names(s):	Broadway			Project ID#:	BUN-BR-02	Project Status:	In Progress
Project Rank:	3	Primary Category of Work	Mechanical	Performance Attribute Total Score	45	Importance Score	TI-1 48.03
Logical Grouping Project ID #'s:	BR-MECH-03						
Bridge Num and Names(s):	06757 Willamette River, Broadway St [Broadway]						

Definition of Problem

The four Rall wheels, which remain from the bridge's original construction, support the weight of the movable portions of the Broadway Bridge. Due to their age and level of deterioration, they are nearing the end of their service life and require replacement. The tracks on which the wheels roll are not well aligned and are causing unnecessary wear on other portions of the structure and machinery. As a result, other portions of the structure will also need to be repaired as a byproduct of the rehabilitation work.

Description of Proposed Solution

The solution is to replace the Rall wheels and their supporting track. This requires raising each leaf of the bridge on jacks in order to pull off the existing wheel, replace the tracks, and install the new wheels. Other worn components on the bridge will be repaired based on further investigation during the design phase of the project. Strengthening of some connecting truss members will likely also be required during the Rall wheel replacement operation.

Project Justification

This work will align the bridge, which will decrease wear on the structure and operating machinery. This work increases the bridge's life span and reduces the likelihood of an unexpected failure.



Right-of-Way:	\$0
Utility Reimbursement:	\$0
Construction:	\$10,438,050
Preliminary Engineering:	\$2,492,676
Construction Engineering:	\$2,492,676
Total Cost at Target Construction Time:	\$15,423,401
Target Construction Time:	2015-2019

Notes:

None entered.